From: Slack, Matthew L CIV SEA 04 04N
Sent: Wednesday, January 10, 2018 8:07 AM

To: Henderson, Kim/SDO

Cc: Scott Hay (shay@cabreraservices.com); Sykes, Kira/PDX; Witmer, Michael/VBO; Brooks,

George P CIV; Robinson, Derek J CIV NAVFAC HQ, BRAC PMO; Janda, Danielle L CIV; Macchiarella, Thomas L JR CIV NAVFAC HQ, BRAC PMO; Banister, Stephen D CIV NAVFAC SW; Edwards, Zachary L CIV SEA 04 04N; Weyant, David B CIV NAVSEA 04,

04N; Liscio, Matthew P CIV SEA 04, NAVSEA DET RASO

Subject: RE: For Review: Responses to Technical Team's Parcel B Comments

Attachments: RASO Comments RTC Draft Parcels B and G Soil Report 010518 MPL (3).xlsx

Kim,

See attached RASO comments from Matt Liscio and myself.

Matt

----Original Message----

From: Henderson, Kim/SDO [mailto:Kimberly.Henderson@CH2M.com]

Sent: Friday, January 05, 2018 6:34 PM

To: Brooks, George P CIV; Robinson, Derek J CIV NAVFAC HQ, BRAC PMO; Janda, Danielle L CIV; Macchiarella, Thomas L JR CIV NAVFAC HQ, BRAC PMO; Banister, Stephen D CIV NAVFAC SW; Slack, Matthew L CIV SEA 04 04N; Edwards, Zachary L CIV SEA 04 04N; Weyant, David B CIV NAVSEA 04, 04N; Liscio, Matthew P CIV SEA 04, NAVSEA DET RASO

Cc: Scott Hay (shay@cabreraservices.com); Sykes, Kira/PDX; Witmer, Michael/VBO

Subject: [Non-DoD Source] For Review: Responses to Technical Team's Parcel B Comments

Hi All,

Attached are the responses to Technical Team comments on the Parcel B portion of the Parcels B and G soil report. We updated the RTC file with a new tab with the Parcel B comments and updated the redlined version of the report to address the comments.

Please note, there are some comments within the redlined report noting the outstanding changes (e.g., editing, minor changes to figures and appendices) that will be made for the final.

Thanks!

Kim Henderson

Project Manager

D 1 619 272 7209

M 1 757 513 6632

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Responses to Comments - Parcel B Draft Radiological Data Evaluation Findings Report for Parcels B and G Soil, September 2017

Former Hunters Point Naval Shipyard, San Francisco, CA						
Reviewer	Date	Comment No.	Section/Figure	Comment	Response	
DTSC	11/14/2017	4	Section 2.1	Section 2.1 of the Report presents a brief description of the conceptual site model (CSM), however, it is not complete. This should be revised as is indicated in various final radiological removal action reports. For example, per the Final Radiological Removal Action Completion Report for Parcel B (March 2012, Section 2.2): The CSM is based on the supposition that radioactive materials likely were discharged from numerous locations throughout HPNS into the storm drain and sanitary sewer systems and may have been released into surrounding soils during the course of normal operations and maintenance or repair activities (DON 2008). Manholes at HPNS have been found to be constructed of concrete and/or brick and appeared to be porous, likely resulting in the transport of contamination into the surrounding soil. Typically, the pipe sections were connected at HPNS by unsealed slip fittings at joints. Some leakage from the piping was anticipated when the storm drain and sanitary sewer systems were installed. Historical information indicates that the storm drain and sanitary sewers often were cleaned by power washing that may have forced radiological contamination out of the piping into the surrounding soils. The most recent power washing event was performed at HPNS in 1999. Power washing of these old sewer systems may easily have caused further cracks or breaks in the piping and subsequent migration of contamination into the surrounding soil. The migration and extent of radiological soil contamination at HPNS likely depended on how and where releases from the storm drain and sanitary sewer systems occurred. This information is repeated in the Parcel G final radiological Removal Action Completion Report (December 2011).	This information was incorporated into the text.	
СДРН-ЕМВ	11/15/2017	1	Parcel B Unit Former Building 114 Site (S0002) page 1, Logic Test 6	Observation: states, "Offsite lab samples for Sr-90 have 4 to 5 times the mass of the onsite gamma spec samples". Explain why the offsite lab samples, required 4 to 5 times the mass of the onsite gamma spec samples for Sr-90?	The samples sent to the offsite lab for Sr-90 and gamma spec analysis shared the same sample ID but were physically different samples than those analyzed at the onsite lab. Although this may be a data quality concern, it was not considered to be evidence of data falsification and the form was updated for clarification.	
СДРН-ЕМВ	11/15/2017	2	Parcel B Building 130 (S0008) page 3 of 8, Gamma Static Data	the 3-sigma investigation level was 6,899 cpm. No measurements exceeded the investigation level. The investigation level was 4.2 standard deviations above the mean". Explain why, the Navy determined the investigation level as 4.2 standard deviations above the	The investigation level of 4.2 standard deviations above the mean was included to provide comparison of the established investigation level to the mean of the measurements collected in the survey unit; however, to avoid confusion, it will be removed from the form. The gamma scan and static measurement observations were also checked and will be updated in the forms.	
СДРН-ЕМВ	11/15/2017	3	Parcel B Building 130 (S0017) page 3 of 8, Gamma Static Data	Observations: states, "The data package for SU-017 in the FSSR reports 250 static gamma measurements ranging from -928 net gamma cpm to 1,807 net gamma cpm, with mean value-241 and standard deviation 447. The gamma background was 6,899 cpm and the sigma investigation level was 9,160 cpm. No measurements exceeded the investigation level. The investigation level was 4.5 sigma values above the mean." Explain why, the Navy determined the investigation level as 4.5 sigma values above the mean?	The investigation level of 4.5 standard deviations above the mean was included to provide comparison of the established investigation level to the mean of the measurements collected in the survey unit; however, to avoid confusion, it will be removed from the form. The gamma scan and static measurement observations were also checked and will be updated in the forms.	
CDPH-EMB	11/15/2017	4	Parcel B Former Building 142 SU 1 and 2	Explain why FSS systematic samples for both SUs collected on the same date (2/7/2006)?	There is no explanation provided in available documentation.	
CDPH-EMB	11/15/2017	5	Parcel B Former Building 142 SU 1 and 2	Explain why both survey units had the same FSS samples 14 of 16 analyzed within 3 working days and two FSS samples analyzed within 1 working day?	There is no explanation provided in available documentation.	

Responses to Comments - Parcel B
Draft Radiological Data Evaluation Findings Report for Parcels B and G Soil, September 2017

Former Hunters Point Naval Shipyard, San Francisco, CA

Reviewer Date Comment No. Section/Figure Comment

Response

Responses to Comments - Parcel B

Draft Radiological Data Evaluation Findings Report for Parcels B and G Soil, September 2017

Former Hunters Point Naval Shipyard, San Francisco, CA

Reviewer	Date	Comment No.	Section/Figure	Comment	Response
ЕРА	12/29/2017	23	General, Section 2.4 Anomalous Soil Samples Report	This work represents the only resampling of potentially falsified data from Tetra Tech EC, Inc., that has been conducted to date. That report stated for Building 517 Survey Unit 2, "The systematic sample results [from resampling] are substantially more elevated than the anomalous [previously reported] set of systematics, suggesting that the anomalous set of systematic samples is not representative of its respective survey unit." (p. ES-4). Please summarize the extent to which the new results from resampling exceeded the results originally reported, which were potentially falsified. For example: What percentage of the new results exceeded the previously reported results? By how much? At how many locations did the new results from sampling exceed the release criteria? What percentage of the total exceedances did that represent? Also, please add that concentrations above the release criteria were found during resampling, as new excavations were conducted in five locations base wide.	Building 517 Survey Unit 2 is located in Parcel E; therefore, this data is discussed in Section 2.4 of the Parcel E report.

Responses to Comments - Parcel B

Draft Radiological Data Evaluation Findings Report for Parcels B and G Soil, September 2017

Former Hunters Point Naval Shipyard, San Francisco, CA

Reviewer	Date	Comment No.	Section/Figure	Comment	Response
EPA	12/29/2017	28	General, Section 4.1.2, Parcel B Fill Units	have concluded that an additional 84 fill units require resampling because of a suspect source. These are listed in Spreadsheet 6 in the Parcel B workbook. Out of the remaining ten fill units, five show signs of falsification and/or data quality concerns. Please see	

RASO Comment

Text needs to be clear that this was the conceptual site model considered during the intial stages of the work, Current conceptual site model suggests that contamination is not as wide spread as suggested by this text.

I wouldn't consider this a data quality concern as this is how the two types of analysis must be performed. There seems to be a misunderstanding that Strontium analysis is a complete different process from Gamma Spec and the exact same dirt can not be used for the two different types of analysis even though the dirt came from the same location and is therefore the same MARSSIM sample. It may be prudent to got a bit deeper with the explanation in the response.

The objective of this is not to question decisions that were made at the time and analyze data to todays standards. The objective of this is to determine areas of potentially falsified data. CDPH would have had to agree to these values at the time.

The objective of this is not to question decisions that were made at the time and analyze data to todays standards. The objective of this is to determine areas of potentially falsified data. CDPH would have had to agree to these values at the time.

If we do not consider this evidence of potential falsification, it may be prudent to say so
If we do not consider this evidence of potential falsification, it may be prudent to say so

Responses to Comments - Parcel B Draft Radiological Data Evaluation Findings Report for Parcels B and G Soil, September 2017 Former Hunters Point Naval Shipyard, San Francisco, CA

Responses to Comments - Parcel B

Draft Radiological Data Evaluation Findings Report for Parcels B and G Soil, September 2017

Former Hunters Point Naval Shipyard, San Francisco, CA

RASO Comment

RASO Comment

Responses to Comments - Parcel B

Draft Radiological Data Evaluation Findings Report for Parcels B and G Soil, September 2017

Former Hunters Point Naval Shipyard, San Francisco, CA

It's possible that this was a typo and the building they are referencing is 157 (see EPA general comment 29)

RASO Comment

This comment from EPA really contains two different comments and the response doesn't address the first in the first two sentences. There seems to have be a misconception leading to this conclusion. Please further explain why there is no correlation between potential falsification in the trench unit vs. the fill unit.

Responses to Comments - Parcel B Draft Radiological Data Evaluation Findings Report for Parcels B and G Soil, September 2017 Former Hunters Point Naval Shipyard, San Francisco, CA